RS-485 Lighted KEYPAD

The RS-485 Keypad is designed to work with a DoorKing Access Plus system.

Setting the Keypad Address

The ONLY valid device addresses that can be used with the Access Plus system are 003 through 008. Each device (keypad, card reader, RF receiver) must have a unique address and the addresses must start with 003 and continue in sequence. The type of device does not matter, only the address matters.

The LED on the circuit board is for troubleshooting:
1. LED continuously ON: Indicates a good connection to the controller.
2. LED Flashing in inconsistent patterns or is OFF: this could indicate a problem with the RS-485 communication (duplicate addresses, loose wire, no proper grounding etc. or no power).

Setting Board Address

The toggle switch and two rotary switches are used to set the address on the keypad. Since the address on the device must be set between 003 and 008, the toggle switch is set to the OFF position (0) and the first rotary switch is set to 0. You only need to set the second rotary switch for the address of the device (003 – 008). In the example above, the keypad address is set for 003.

Each device (card reader, keypad and/or receiver) must have a UNIQUE address and continue in sequence. DO NOT Skip an address when using multiple RS-485 devices.

The order in which multiple RS-485 devices are connected to the Access Plus controller does not matter. What is important is that the addresses must be in sequence starting with 003.

Access Plus System Interface Board

A maximum of 6 RS-485 devices can be wired in a daisy chain.
RS-485 Daisy Chain Wiring

When 3 RS-485 wires are connected to terminal (end of daisy chain), then SW2 termination switch MUST be ON. When 6 RS-485 wires are connected to terminal (middle of daisy chain), then SW2 termination switch MUST be OFF.

A maximum of 6 RS-485 devices (RS-485 Keypad, Cardreader or MicroPlus RF Receiver) can be wired in a daisy chain, in any order to the Access Plus system.

DO NOT use the Access Plus system power to power the RS-485 devices. RS-485 device must use a separate power source.

Maximum distance from end to end is 4000 feet in a Daisy Chain.

Access Plus System

RS-485 Daisy Chain Wiring

RS-485 Keypad

RS-485 Cardreader

RS-485 MicroPlus RF Receiver

End of Daisy Chain Terminated Device

If wiring will be outdoors or underground, use Cat5e Gel Filled (flooded) UV Resistant Direct Burial Cable.